

About the Waste Facilities

NASA has the ultimate responsibility for radioactive waste generated from the Reactor Facility Decommissioning Project until another NRC-licensed facility takes possession of the waste. NASA's Decommissioning Team maintains direct oversight of safe waste handling operations and has formalized contracts with three licensed waste facilities to accept dry, solid, low-level radioactive waste (LLRW):

Much of low-level radioactive waste looks like ordinary trash. It consists of contaminated wood, concrete, glass, metal, fabric, paper and soil. All waste accepted for disposal must be in a dry, solid form - no liquid waste is accepted for disposal. No toxic chemical waste or high-level radioactive wastes, such as spent fuel from nuclear reactors, are accepted at the disposal sites.

An Alaron and Envirocare waste professional are on-site to review and evaluate the waste inventory and provide expertise with:

Proper packaging to meet disposal site waste acceptance criteria,

Selecting, scheduling and pricing of shipping containers

Coordinating transportation methods and shipping manifests.



B-25 boxes were loaded, surveyed and secured for transport to Alaron.



A cask containing horizontal beam tube sections previously removed from the side of the reactor tank was shipped to the Barnwell facility in early September.

Alaron Corporation

Envirocare of Utah, Inc.

Barnwell Low-Level Radioactive Waste Disposal Facility

ALARON CORPORATION

Wampum, Pennsylvania

Alaron Corporation, located near exit 2 off the Pennsylvania Turnpike, has been providing waste processing services since 1983.

NASA has trucked approximately 20,000 cubic feet (as of October 2003) of very low-level radioactive waste (all Class A and much of it shipped as Low Specific Activity) in B-25 boxes and SeaLand containers to Alaron for its waste processing capabilities, specifically:

COMPACTION

Alaron's extremely powerful on-site compacting equipment is used to consolidate and press together the dry, solid, very low-level radioactive waste. This process effectively decreases the waste volume and reduces the amount of space it will take at the disposal site.

RECLAMATION & RECYCLING

Alaron can decontaminate and reclaim some materials - chiefly, certain metals and types of equipment, then recycle the material for its originally intended purpose. This process eliminates the need for disposing the material as radioactive waste.

For more information on Alaron, visit www.alaron-nuclear.com

ENVIROCARE OF UTAH, INC.

Clive, Utah

Envirocare of Utah, Inc., located 80 miles west of Salt Lake City, is a full-service waste consulting company and is

- The nation's largest commercial facility licensed to accept Class A low-level radioactive waste (LLRW) for disposal,
- A hazardous waste disposal facility licensed by the State of Utah and the United States Environmental Protection Agency (EPA) to receive, possess, use, treat and dispose of mixed radioactive materials.

Envirocare disposes radioactive waste material in above ground, engineered disposal cells that meet federal and Nuclear Regulatory Commission (NRC) disposal requirements.

For more information on Envirocare, visit www.envirocareutah.com

BARNWELL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL FACILITY

Barnwell, South Carolina

The Barnwell facility, located on Osborn Road in Barnwell, occupies land owned by the State of South Carolina. Chem-Nuclear Systems operates the facility with oversight by the South Carolina Department of Health and Environmental Control (DHEC).

- Only dry, solid Class B and Class C low-level radioactive waste is accepted at the Barnwell facility. It is shipped to the site in waste liners housed in steel and lead casks.
- The liners and their contents are placed in large concrete vaults located in engineered earthen trenches (disposal cells) excavated to depths of 30-feet below grade.
- When a vault is full, its concrete lid is put in place; vaults may be stacked up two or three high. Sand and soil is backfilled around and over the sealed vaults.
- An engineered cap consisting of multiple layers of sand, clay, high-density polyethylene and topsoil covers the disposal cell. Shallow rooted grasses are planted to control erosion.

For more information on Barnwell, visit www.chemnuclear.com